



Department of Energy

Fermi Site Office
Post Office Box 2000
Batavia, Illinois 60510

E-MAILED
8/24/2011

AUG 15 2011

Dr. Nancy Grossman, Director
Environment, Safety and Health
Fermilab
P.O. Box 500
Batavia, IL 60510

Dear Dr. Grossman:

SUBJECT: U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA) RADIONUCLIDE
INSPECTION REPORT FOR THE FERMI NATIONAL ACCELERATOR
LABORATORY (FERMILAB), AUGUST 2011

Reference: Letter with report, from M. Murphy to M. Weis, dated August 4, 2011, Subject:
Same as Above

I have enclosed for your records the USEPA radionuclide inspection report from the subject inspection performed by the USEPA on May 23, 2011. The inspection evaluated Fermilab's compliance with the National Emission Standard for Hazardous Air Pollutants (NESHAP) rules for Radionuclide Emissions found at 40 Code of Federal Regulation 61 Subpart H. The inspection report found no compliance issues.

We would like to thank the many Fermilab staff that participated in the inspection, especially Amber Kenney who coordinated the logistics for the inspection. If you have any questions, please contact Rick Hersemann, of my staff, at extension 4122.

Sincerely,

Michael J. Weis
Site Manager

Enclosure:
As Stated

cc: P. Oddone, w/o encl.
Y. - K. Kim, w/o encl.
B. Chrisman, w/o encl.

paper file: Permits/Radionuclide Emissions/Annual Reports
ESH Docdb #1801



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

**Site Visit and Inspection of
Fermi National Accelerator Laboratory (FERMI LAB)
Under 40 CFR 61, Subpart H**

I. FACILITY IDENTIFICATION

A. Facility Location

Fermi Site Office
U.S. Department of Energy
Kirk Road and Pine Street
Batavia, Illinois 60510

B. Responsible Official

Michael J. Weiss
Site Manager
U.S. Department of Energy
Fermi Site Office
P.O. Box 2000
Batavia, Illinois 60510

II. DATE OF INSPECTION

May 23, 2011

III. PARTICIPANTS

A. Facility- USDOE

John Scott
Rick Hersemann
Berline Short

B. Facility- FERMILAB

Nancy Grossman
Martha Michels
Donald Cossairt
Vernon Cupps

Amber Larson
Eric Mieland
Kamran Vaziri

C. U.S. EPA
Michael H. Murphy

IV. ACRONYMS AND ABBREVIATIONS USED IN THIS REPORT

CFR	Code of Federal Regulations
g	Grams
km	Kilometer(s)
µm	Micrometer, Micron (0.000001 meter)
MDL	Minimum detection Limit
mph	Miles Per Hour
N/A	Not Applicable or Not Available
NESHAP	National Emission Standard for Hazardous Air Pollutants
QA	Quality Assurance
QAPjP	Quality Assurance Project Plan
QC	Quality Control
SOPs	Standard Operating Procedures
U.S. DOE	United States Department of Energy
U.S. EPA	United States Environmental Protection Agency

V. OBJECTIVE/SCOPE OF INSPECTION

The objective of this inspection/site visit is to verify the compliance of the facility with the NESHAP rules for Radionuclide Emissions rules found at 40 CFR 61 Subpart H. The inspection consisted of interviews with staff that collect, compile, and analyze the data, a site evaluation of the stack sites where emission data is collected, a document review of SOPs along with the appropriate QA/QC, and a review of the annual compliance demonstration reports that have been submitted to U.S. EPA for the last two years.

VI.**FACILITY DESCRIPTION**

Fermi National Accelerator Laboratory (FERMILAB) is located in Kane and DuPage counties in the greater Chicago area. It covers roughly 10.6 square miles (27.5 square kilometers) in an area, which is rapidly changing from agricultural to residential use. Approximately eight million people reside within 50 miles (80 kilometers) of the site. The communities of Batavia (population 23,866), Warrenville (population 13,363), and West Chicago (population 23,469) are within 2 miles (3 kilometers) of FERMILAB, based on 2000 Census figures. The terrain is generally flat as a result of past glacial action, with elevations ranging from 715 feet (218 meters) to 800 feet (244 meters) above mean sea level (MSL). The climate is continental, with a typical rainfall of about 35 inches (90 centimeters) per year. The facility consists of a series of proton accelerators used to conduct basic research in high-energy physics and related disciplines.

VII.**INSPECTION FINDINGS**

A site visit/inspection, held on May 23, 2011 at the FERMILAB site in Batavia, Illinois, covered the NESHAP rules for Radionuclide Emissions from Department of Energy owned or operated facilities found at 40 CFR 61, Subpart H. During the inspection, a site tour was provided to obtain a better understanding of the location of the stack emissions, the sampling processes, and the site terrain. A copy of Fermilab's 2009 compliance demonstration submittal was compared to the information found during the site visit no detectable differences were found from the documents received by U.S. EPA last year. The current year's report is currently undergoing FERMILAB's managerial review prior to being sent to U.S. EPA to meet the required submittal date of June 30, 2011 for the previous calendar year.

The Quality Assurance/Quality Control (QA/QC) information provided by the staff at FERMILAB documented the procedures that are followed for sampling the radionuclide emissions being generated from the activities of the facility. The documents followed standard protocols for this type of document.

GENERAL FINDINGS

No compliance issues were noted at this time.